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IN SEARCH OF A FAMILY DOCTOR

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Many families fondly remind themselves of the era, just a few generations ago, when medical advice and reassurance at the doorstep could be obtained from a family doctor who was looked up to by all its members, old and young. The advent of the general hospital with its wide range of services, housed under one roof, led to the disappearance of this cherished association. It is time for the medical profession with its age-old tradition of compassion and care, tarnished now, to re-establish such an institution or modernised and modified versions thereof.

The practice of scientific medicine is based on correct diagnosis confirmed through laboratory investigation. This alone distinguishes it from other therapeutic alternative systems of medicine like Homeopathy, Ayurveda, Siddha, Unani, acupuncture and so on. Absence of correct diagnosis results in haphazard treatment and overlooking the real condition can lead to further complications. An unscientific approach to diagnosis has forced patients to place undue reliance on alternative systems of therapy, which obscure and delay proper treatment.

In the practice of scientific medicine, there should not be any great difference in the lines of treatment offered by either the general practitioner or the specialist and the hospital consultant, so long as adequate diagnostic facilities are available. Family care specialities should be encouraged so that medicine is affordable at relatively inexpensive cost with a reasonable degree of comfort when in-patient care is needed. The evolution of a better curriculum and superior training of the `basic doctor' at the internist stage with wider exposure to all types of medical, surgical, pediatric, ophthalmic and resuscitative emergency procedures is called for to produce a general practitioner who can command the trust of an informed public.

The distinction between health care and medical care is brought out by emphasizing that a good health care system should, ideally, prevent the demand for medical care by concerning itself with the promotion of health and individual fitness rather than the treatment of illness. It should be obvious that the supply of safe drinking water, environmental sanitation, garbage and waste disposal, atmospheric and water pollution, poverty, and the factors facilitating the spread of communicable diseases are not the doctor's direct concern. They are the responsibility of the government to be dealt with by corporations, municipalities and panchayats. The health of the people is a sizeable part of national wealth and a major component of economic and social progress. People represent the work-force of the nation and economic loss caused by disease lowers the quality of work and production.

This essay represents an attempt to address the questions concerned in providing medical care to the common man at an affordable cost. It is meant to acquaint the intelligent layman and the socially-conscious doctor with the framework for a refined moral concern for public health and medical care for all. There is a real need for order and coherence in the provision of medicare to the teeming millions in the next millennium. Cost-benefit considerations have to be applied to the `medicare mosaic' ranging all the way from minor and major illnesses to advanced surgical intervention. A common diagnostic schedule should be evolved in the medical hierarchy with all its varied levels of organization and competencies. It should include a dignified role for a new cadre of family physicians to sustain the human touch in medicare. While availing himself/ herself of this diagnostic base, the patient should have a reasoned option to choose any of the divergent therapeutic approaches which appeal to him/her.

The problem

Even in conditions of so-called health, there are times when one feels unwell and run down; not actually an ill sensation but with nagging aches and pains affecting the rhythms of life and leaving one unreactive and indifferent. Most people are not at their physical best and in good cheer all the time. This is perhaps the reason why people resort to stimulants of various sorts in the form of food, beverages, and entertainment, to ward off the inevitable ennui and boredom that assail one sometimes.

Fortunately many conditions are self-limiting. The suffering in the world is out of all proportion to the actual occurrence of disease. Disturbances in bodily function in over-sensitive individuals make them transfer their worries to functions which the body unconsciously performs; and they complain about the emptying of the bowels, bladder, uterine functions, breathing, heart beat and respiratory disorders. These are common in people who wish to avoid disagreeable situations and those who wish to attract attention or elicit sympathy for fancied or real suffering. Belief in the ill effects of constipation and the necessity of purgatives in health and illness is of great antiquity. The superstitious belief in black magic and evil spells cast by witchcraft led to the persecution of people accused of being witches or sorcerers. Diseases were once regarded as afflictions from God, a punishment for sin, and possession by evil spirits or devils was a matter of faith.

Progression to actual illness produces bodily reactions of discomfort, primarily disorder in bodily functions. Loss of appetite, headache, and insomnia occur, and fever may supervene. Sickness is felt, health little or not at all. In disease, the whole body becomes a prison turning inwards. The activity in the outer world with its accustomed routine and daily ritual is halted and the planning for the future with its schedules and appointments ceases abruptly. People become captives of their own altered pathology and are conscious only of pain and hurt. Fear of hurt, sickness, old age, and death are ancient terrors of mankind. Nothing is more important than the Nation's health and distributive justice must ensure that timely, easy, and affordable health and medical care are available to achieve the rather illusory goal of "Health for All" by 2000 A.D.

Generally, people do not rush to the practising doctor for minor troubles like a little injury, indigestion, vague general weakness, body aches, joint pains, or some fever. They try to secure some relief with home remedies, self medication, or they even go to the local pharmacist in the nearby drug shop for some tablet or other from his formidable therapeutic store of a variety of pain killers, cough syrups, tonics, and even antibiotics. In both the urban and rural areas, the local druggist has become the medical advisor. It is a worried mother who takes her ailing child, as an emergency measure, to the child specialist for help when it goes off its feed and is constantly crying, and she is unable to get the relief of a little sleep; or when it has high fever with fits; or severe diarrhoea, which is getting worse with the infant even unable to cry; or a persistent hacking cough, or failure to grow and put on weight. In older people, it is severe injury, accidental fracture, convulsions, prolonged fever with loss of weight, sudden pain in the chest, heavy bleeding anywhere, bothersome skin conditions, a growing lump somewhere, an eye deficit and a nagging tooth ache and so on that push them to the doctor. Chronic illness like painful joints, sudden paralysis and weakness, diabetes, high blood pressure, cataract in the eye, unusual uterine bleeding, asthma, head injury and so on are some of the many conditions when the family decides that it is necessary to see a doctor or visit a hospital with its wide range of specialties, or a super specialist to attend to the patient. It is the mounting sense of anxiety caused by the failure of the illness to respond to the normal remedies that prompts action. Therefore, there is a dire need for an easily available and affordable doctor within quick reach.

The confused and perplexed patient does not know to whom to turn for guidance and support at a critical juncture. The questions that then crop up in the patient's (or the attendant's) mind are:-where can I be confident that the condition will be properly investigated, diagnosed, and good relief provided; how much will it cost; who is the doctor who can be trusted to look after me; and where is he available? Accurate, reliable, comprehensive information including costs and time is not generally easy to obtain, even when the patient is willing to pay for the competence, the attention, and the time of the busy doctor. Much of the anxiety is generally resolved by rushing the patient to a teaching hospital with various disciplines, or to a super-specialty corporate hospital or a private nursing home. This is done in spite of the expenditure involved in the fond expectation that the more one pays, the better will be the nature of the treatment administered. Popular fancy, fanned by sensational articles in the press and attractive display in the electronic media, announcing breakthroughs and revolutionary advances in therapy, makes for the emergence of the superspecialist and induces the flight of patients to him, even for preliminary investigations. Rising extravagant, and even sometimes unreasonable, public expectations tend to demand miracles from the medical profession. Delay in treatment complicates medicare and serious afflictions are aggravated by postponing action. The hope is that a remedy will be found in the earlier stages before they are converted into conspicuous disease. In the present situation of depersonalized medical care, it will be more comfortable and less anxiety-producing if the care of a family physician is on hand. It must be fully realised that a doctor has an unusual physical and emotional contact with the patient in his elucidation of the case history and examination since his function is that of a confidant who has to listen to the unspeakable and discuss unmentionable facts, which are not revealed even to the members of his own family. The elan of vigorous living and the ancient pains of old age are best understood only when experiencing them. In spite of modern drugs and remarkably sophisticated medical technology, which can at times be both life preserving and life saving, every one has to endure and willingly accept, as a part of existence, the inescapable human condition of inevitable pain, loss of function in old age, and death.

The Qualified Doctor

The qualified undergraduate, the basic doctor envisaged by the Medical Council of India, should be able to handle primary health care for the vast bulk of people, even in rural areas, through an effective preventive remedial health and medical care organisation. He (includes She) should be able to fit into a health care set-up or assume the role of a general medical practitioner. The profession's dual objectives of prevention of disease and promotion of community health and, alternatively, the provision of the best medical care possible, can thus be fulfilled. With further specialised training and the provision of appropriate curricula, he/she can be a public health officer, a consultant in a speciality, a qualified teacher in a medical discipline, and a medical researcher to meet the widening spectrum of career opportunities. It is obvious that only a properly modified pattern of medical under-graduate and post-graduate education will address all these varied requirements in a "population care concept" of both preventive health care and curative medical care. A flexible medical "core curriculum" needs to be tailored which gifted, highly motivated students can project into their future role in society. Other curricula should be supplemented with appropriate elective courses to meet individual needs and interests at a later stage of diversification into increasing specialisation. The student should be exposed to all disciplines so that he is more aware of the relation of his own interest to all of medicine and the medicine of the future. A common curricular content needs to be evolved so that he can enter any interface of medical disciplines with technology, engineering and bio-mathematics. Such a research interface will provide a liberal education that will produce constant reinforcement of duties, responsibilities, and obligations to the society that is supporting doctors.

The elective courses may include subjects such as psychiatry, genetics, molecular biology, family medicine, epidemiology, emergency procedures in medicine, surgery, obstetrics, pediatrics, E.N.T, ophthalmology, resuscitative procedures, instrumentation and electronics, biostatistics and biomathematics, bio-medical engineering, systems analysis, computer management and hospital administration. For the progress of medicine, a multipoint entry system needs to be introduced for motivated persons that will permit them to receive education at any stage and at all levels. The faculty of an institution exists to communicate knowledge, from one who knows to one who does not. The superior competence of teachers, specialists and scientists to master, communicate, and advance knowledge should be fully utilised. "We all have defects in our intellectual training, where the teachers of a given subject failed to "put it across" to us, and conversely many of us have had our future careers determined by the personality of a first-class teacher, who made a living thing out of the bare outlines of his profession". The present system of examination bristles with such numerous non-academic issues that the intelligent and persevering student, has begun to wonder, "whether honest study and effort are worthwhile". This situation can be improved only by good texts, improved curricula and audio-visual aids, that convey modern trends. Continuing education and retraining for all categories is a must, in order to keep the profession well-informed and up to date. It is said that the worth of a school is judged by its graduates.

The So-called Routine Clinical Investigation

How does a doctor (general practitioner) make a diagnosis of the ailment ? The term `routine clinical investigation' which is often used is in reality quite a complex process requiring training, knowledge, experience, ingenuity, understanding of disease and its differential diagnosis. It can be considered a form of pattern analysis and is a major function of the physician. It consists of the recording of the symptoms of illness as revealed by the medical history, the signs of illness disclosed by physical examination of all the organ systems, the abnormal results of laboratory and other tests, all of which require professional interpretation. It involves the testing of a tentative diagnosis and arriving at a more definitive conclusion regarding the final diagnosis. Diagnosis may sometimes be quite difficult and may need to be confirmed by further investigation. Sometimes, there are simple useful procedures that can be utilised with benefit. The elucidation of the medical history of the patient, or what is gathered from the medical attendant, is a tricky task, which improves with the experience of the doctor and his ability to ask the key questions that define the problem. The report on the clinical trinity of temperature, pulse, and the respiratory rate gives a broad indication of the nervous, circulatory and pulmonary systems to the illness, whose special features may be ascertained further. A preliminary but careful examination of organ systems, the colour, texture and the warmth of the skin, the general state of nutrition, the detailed examination of the nervous system for normal awareness and function, the presence of enlarged lymph nodes, palpation of the liver, spleen, the kidneys and the bladder, the peristaltic function of the intestines, disturbances of locomotion, the hearing of the heart with a stethoscope for any abnormal features, all of them together allow an intelligent physician to arrive at a rough diagnosis of what has gone wrong.

This broad general survey is perhaps the most important service the doctor offers to the patient, since it promises the right line of treatment once there is recognition of its cause. It enables him to gain an idea whether bodily organ functioning is normal, or accompanied by changes in their rhythm and position which can be classed as `abnormal'. He can thus feel the anatomical locations of various organs and the surface relations to bones to ascertain their size, smoothness, contour etc. An intelligent clinician can, by such careful examination, arrive at a tentative diagnosis which has to be supported and further confirmed by laboratory investigation.

The Supremacy of Laboratory Investigation

The physician without modern laboratory diagnostic aids is an anachronism. Appropriate laboratory investigation is essential to detect certain diseases at the initial stages of onset in which early treatment is swift and effective. Accredited diagnostic laboratory services, though at the elementary level of the microscope and the test-tube, should be present even in primary health centres so as to detect common disease conditions like malaria, tuberculosis, filariasis, amoebic infection, and anaemia. Absence of diagnostic and X-ray investigation in disease states like diabetes, kidney and liver diseases, parasitic infestations, and blood cancers result in haphazard treatment while overlooking the real condition and lead to further complications. Such a diagnostic laboratory base must be practiced faithfully even at the so-called Primary Health centres (PH.C.'s). Diagnostic laboratories protect the health of the individual in the same way that food, drug, health, and forensic laboratories safeguard the health and well-being of the community. The results of the lab-investigations have a crucial bearing on diagnosis and treatment and their reliability is what sustains the clinician and determines the quality of services rendered. It is of the greatest importance to utilise the skill and conscience of trained laboratory staff for the right objective. The success of many small mission and charity hospitals in outlying parts of the country can be traced to a consistent and continuous application of relatively simple diagnostic tests not requiring highly complex instrumentation. It is essential therefore, to have a State-wide setup to initiate, control, and coordinate diagnostic laboratory services at the regional level of PH.C's, mandal and district hospitals, and to update, strengthen, and expand the already existing services in the teaching hospitals which have only a modest set-up unequal to the heavy demands placed on them.

The purpose of a large and centralised organisation in charge of diagnostic investigation will be to institute and standardise tests and procedures in all the steps of the hierarchy so that results and methods will not vary unduly and to guarantee uniform quality of the reagents employed. It is important to bear in mind that all equipment and instruments have a certain duration of life and that reagents and glassware are expendable items that have to be replaced from time to time according to a fixed schedule. Quality control should be continuously exercised by sending at periodic intervals to the various laboratories concerned standard specimens and standardised sera prepared from pooled serum for investigation, report, and further scrutiny. A routine laboratory, therefore, can give trustworthy and useful results only when it is well organised and properly staffed enough to follow the correct procedures in order to avoid inaccuracies and misinterpretation of results creeping in. Accredited laboratories are a must in general medical practice. It takes many years of dedicated effort in the face of rapid change and exploding knowledge to become expert even in a limited segment of a speciality. These acknowledged experts, professors in the respective laboratory disciplines of medical colleges, are unfortunately placed in an obscure and difficult position where even the opportunities to extend the frontiers of their knowledge are denied to them for no fault of theirs. The limelight is reserved for these specialists in more developed countries for research contributions to the greater progress of medicine.

The Aim of Laboratory Investigation

The increasing knowledge of the primary chemical events concerned with the origin of deficiency, metabolic, endocrine, hereditary, and degenerative disorders has facilitated the early identification of the disease at the initial stages, before it produces the symptoms of the full-blown condition. Patients can therefore benefit by the institution of the right type of treatment, before the crippling disease with its advanced lesions and poor prognosis presents itself. Such

biochemical biopsy procedures are now more or less automated to present a "biochemical profile" revealing the molecular abnormality concerned. These efforts to automate difficult investigations hold out the promise that they can be extended to large and more remote populations. Automated and computerized equipment can not only provide more information on more people, but can produce multiple research data on each person more accurately at a lower cost in a shorter time.

Every complaint has its battery of confirmatory screening tests and discrimination is necessary to differentiate between the optimal minimum tests necessary and those that are fully descriptive of the case on hand which will only be needed for research investigation. It would be a good idea to consistently apply Richard Asher's criteria when clinicians order tests:

- Why do I order the test?
- What am I going to look for in the result?
- If I find it, will it affect my diagnosis?
- How will this affect my management of the case?
- Will this ultimately benefit the patient?

The Laboratory Investigator

The preparation of the reagents, the calibration of graduated apparatus, the proper timing of the tests, the observation of the usual precautions in data collection to avoid specimens being lost or mishandled, are all generally supervised by the laboratory chief. Wrong reporting, performance or interpretation of the results can cause endless worry and distress all round. The chain of events in laboratory diagnosis are subject to human error all along the way; in collecting, labelling, mishandling or loss of specimen, technical mistakes in instruments or procedure in the laboratory, and mistakes in recording or reporting of the results of the test.

The laboratory investigator has a life-long pursuit ahead of him. He has to develop special skills and immense training to determine the small variations which can occur in a tiny specimen of blood and tissue. He has to explore the normal limits of variations that can occur in different cells and different chemical constituents and pinpoint differences which are significant only to the trained hand and mind. The various tests in the different highly specialised laboratories are based on the concept that comprehensive physical, chemical and refined microscopic and other investigations of tissues and body fluids can yield important clues to disease processes in the body. The handling, use, and maintenance of sophisticated and highly complex instruments poses yet another problem. It is said that quantitative measurements can be left to a trained person, but interpretation of qualitative changes requires the expert. There is a sense of drama and adventure in this for the specialist who, unknown to the public eye, peers through the microscope at dangerous microbes, measures numerous reactions in the test tube and pores endlessly over books in the fascinating attempt to correlate the laboratory report with the clinical picture of a sick patient. Such men are getting discouraged at the continuous neglect meted out to them and would like to see a new outlook dawning on the administrators. The difference between the laboratory technician and the laboratory scientist is akin to that between the driver of a car who operates only a few controls, and the vastly different nature and quantum of training bestowed on the automobile engineer. It is easy enough to manage a car when every thing is working smoothly, but when something goes wrong, expert knowledge is required to trouble-shoot and correct the problem.

The so-called routine laboratory investigation, though carried out by the specifically trained technician with about two years of rigorous training, has to be done with care and proper handling. He can carry on the routine job when the reagents, apparatus, and instruments are provided by the laboratory chief.

The Prime Necessity for Laboratory Aids even in Primary Health Centres (P.H.C.'s)

The effective performance of duty by the qualified doctor in rural surroundings needs a loyal and cooperative team of trained hands who can understand and obey his orders. Drugs, instruments, and materials must be ready at hand in a miniature medical set-up that can effectively serve the community. Since patients have not merely to be clinically examined, but investigated as well, minimum laboratory equipment for the examination of blood, body fluids, and faeces must be available. For the practice of scientific medicine and in order to upgrade the quality of medical care administered, it is essential to have a diagnostic base, even if it exists at the elementary level of the microscope and the test tube. The physical, chemical, and microscopic examination of urine or a blood smear, and the use of simple staining procedures can satisfactorily resolve many diagnostic problems, even in a rural setting, without recourse to more sophisticated instrumentation. A trained laboratory technician with appropriate experience, equipped with a functioning micro-scope, slides, stains and chemicals, can present slides and specimens for examination by the doctor. To one trained in scientific medicine, these investigations are commonplace.

Though it may be needless to enlarge upon the value of these elementary tests which can be provided at every P.H.C., it is essential to stress that ordinary examination of urine can detect a great number of diseases like diabetes, kidney and liver disease and also help to rule out a number of disease states when the urine is found to be `normal'. Similarly a number of diseases like anaemia, malaria, tuberculosis, filariasis, and diphtheria can be revealed by a microscopic examination of a blood smear with an appropriate staining. An examination of faeces can distinguish between an amoebic and bacillary origin, and detect also the infestation by helminths by observing their eggs and larvae.

The floor area requirements and the estimated cost of furniture, equipment, glass-ware, chemicals as also the number and nature of trained personnel required to run the diagnostic laboratories at the PH.C., Taluq, and the District Regional Centres can be obtained by consultation with the professors of Biochemistry, Microbiology, and Pathology of the teaching hospitals. Arrangements must be made for training of Medical Laboratory Technicians, of the required grade of skills and quality, who can handle all the investigations. It is essential to institute and standardise tests and procedures in all the centres, so that results do not vary unduly. A central pool may be created to guarantee the supply of uniform quality of chemicals and reagents employed. It is also important to distribute fairly the nature and quantum of the work designated at different centers in order of increasing complexity, sophistication, and time required for their conduct.

Specialists and Super-specialists

No doctor can possibly know enough to make a final decision on every problem presented to him and it is therefore necessary for him to consult specialists and super-specialists who possess more skills, expertise, and appropriate technology in different areas of medicine. Each specialist presides over separate parts of the human anatomy, each with its particular diagnostic armamentarium and complex instruments. Each speciality and super-speciality has developed investigations based on machines and procedures to interpret quantitative variations from the so-called "normal range". The terminology of modern medicine likens the patient to a

complicated machine with various organ systems subject to periodic servicing and overhaul. Some cynics describe the ill person as, "an untidy accumulation of displaced electrolytes and disordered enzyme systems". Imageology with ultra-sound and magnetic resonance, computerised tomography, laser applications, whole-body scans, heart-lung machines, respirators, positron emission, automated and computerised biochemical profiles, and so on leave no part of the body a mystery "black box" any longer, and are in addition "non-invasive" in character. Fibre-Optic Endoscopy, which has revolutionised surgery has been described as an "inner eye" to facilitate direct observation and even surgery of previously inaccessible areas of human anatomy without recourse to major surgery. Such bewildering technology with its dazzling results, has induced in the general public an acute consciousness of disease and produced a scare-mentality which drives them to the super-specialist. People talk more of disease than optimal health, and prefer to leave the management of the disease to the specialist, forgetting that the preservation of personal health is the individual's own concern. In economic terms, it is the rich and super-rich with chronic illnesses that corner the benefits of the advances and progress in the medical sciences and take away the larger slice of the economic pie. Millions suffer from want of nutritious food, warm clothing, and a shelter to sleep under. Sympathy and brotherly kindness and the development of one and all are the primary concerns of humankind. People exhibit their culture in proportion as they help the less fortunate and promote their beauty and dignity. Without human interaction and understanding, there is depersonalisation and loss of contact. Understanding, and perception of another's pain, though it cannot be shared, is part of a human cultural heritage, which includes the approach of sharing and caring, affection and love. Self-indulgence without consideration for others, leads to self-abuse and loss of human dignity.

The doctor's profession is characterised by the willingness to help others. Professional callousness, negligence, and sheer incompetence are age-old forms of medical malpractice, which unfortunately persist. In order to restore the general hospital to its original status as a haven of medical care, medical specialists should devote their entire attention to medical teaching and research, isolated from distracting private practice.

The Role of the General Practitioner in Medical Care

It may be that the relatively inexperienced medical graduate is insufficiently equipped to fulfil the extravagant expectations of the more medically-conscious patient. He has, anyway, the long training to react rationally in a moment of crisis to life-threatening situations. He should be imparted, during his course of study, the training to handle emergencies of various sorts. He should keep an emergency kit in readiness at all times and not withdraw from his professional responsibility by simply directing the patient to the hospital or to the super-specialist. Even in such unavoidable cases, he should provide the referral of the patient to the specialist with a record of his clinical findings and a note on the action taken. This will also avoid the grave charge of negligence and raise the status of the doctor in the eyes of the general public.

Since much of personal medical care is given by the private community doctor, he can form the nucleus of a National Health Service as in the United Kingdom. A general practitioner who assumes the responsibility for a defined population (in terms of area covered or number of families served) can, through an effective referral system, assume many roles. He can ensure better health surveillance, since he handles different age groups by early detection of treatable disease and extend immunisation for the child. Through close contact with patients, he can alter public attitudes and behavior and be a conduit for health education. He can also participate in periodic school health programmes. By periodic health examination, he can monitor the evolution of grave illnesses like tuberculosis and cancer. He can spare the time, expertise and

the psychological support for providing relief to the suffering patient, even during specialist surveillance.

The technological shift in medical care has lowered the status of the general practitioner, who is regarded as neither a family practitioner nor a specialist, in the eyes of the consultant and the general public. He has been even cynically termed, "a mere tout of the specialist". There is a deplorable tendency to describe him/ her, as a non-specialist M.B.B.S. doctor, although it has taken a long period of training to produce him/her. A few years of post-graduate training which they could not avail themselves of for some non-academic reason or other, would have made them specialists.

It is essential to narrow the unconscionably wide and expensive gap between the specialist and general practitioner so that the latter is better prepared to meet life-threatening situations. Such measures will enhance his professional status in the community and enable a family to develop a robust faith in him. The evolution of a better curriculum and improved training of the "basic doctor" at the internist stage, with wider exposure during the internship period to all types of medical, surgical, obstetric, pediatric, ophthalmic and resuscitative emergency procedures is urgently called for. This may necessitate even the extension of the internist period of training.

There is a crying need for a single doctor chosen by the patient to be in charge of the patient's general welfare in order to ensure continuing care and timely reassurance, even during specialist attention. He will be conversant with the medical history of the patient through good record-keeping and know enough of the course of treatment suggested by the specialist to have a dialogue with him on the formidable institutional and investigative support available to the specialist. Such a positive type of doctor-specialist interaction can occur only when there is a family care doctor, who can be responsible for continuing medical care during and after referral to the super-specialist, whenever required. Relatively very few patients will need the help of the super-specialist, except in the serious chronic ailments affecting the heart, the kidney, and the weight-bearing joints. Delay in treatment can be avoided by reliance on the family doctor.

The Predicament of the General Practitioner

The general practitioner has an onerous job on hand as he exists on the borderland between superstition and scientific medicine. He depends on private illness for his living and is compelled to show immediate dramatic results in treatment, irrespective of correct diagnosis. The reason why he is unable to define even common illnesses is that, in most cases, he is unable to use diagnostic laboratory aids and has to depend mainly on his clinical acumen, which is at best a doubtful entity. He prescribes therefore, the most powerful medicines available and this results in a comic situation of "under-diagnosis and over-treatment".

This breed of doctors, who have little access to diagnostic facilities and who can depend only on impressions derived from the patient's physical signs and symptoms, are easily tempted to adopt a therapeutic regimen at the coaching of medical representatives of drug firms. They can cover up many of their deficiencies in professional knowledge and practice by prescribing highly potent drugs. They succumb to the lure to show instant results and obscure diagnosis by employing a polyvalent combination of painkillers, anti-histaminics, tranquillisers, broad-spectrum antibiotics, corticosteroids and anti-malarials. This type of blunderbuss therapy and floundering in clinical therapeutics is to be greatly deplored as it is a travesty of scientific medicine and medicare that can conceal serious illness and lead to greater complications. It degrades the status of the doctor to that of a quack. It is essential that those who take up a medical career have the right motivation in respect of both study and service in the practice of

medicine. The laxity of government and pharmacists in the free sale of dangerous drugs is worthy of severe condemnation.

The general practitioner is the link, perhaps the weakest link, in the chain connecting the patient to the hospital consultant or to the specialist and the super-specialist and to the vast system of medical relief afforded by the great advances in medical knowledge and modern technology. The practising doctor faces undisguised competition particularly in the rural areas from dispensers of a plethora of alternative forms of therapy with secret herbal and other medicines and incantations. Secret medicine, besides being immoral, keeps patients captive for long periods of time and aggravates conditions which could have been treated effectively earlier. Such medicine men and others called Registered Medical Practioners-R.M.P's (health workers who have not received training even to a limited extent in the knowledge of organ systems or in understanding disease processes) can by no means be equated with a qualified doctor who has been trained for several years in the art and science of medicine in recognized medical institutions. Even such doctors have to learn and re-learn and make up many of the deficiencies in a process of continuing medical education in the university of community life.

The main source of competition for the general practitioner is from the well-established consultants in government teaching hospitals. Teaching hospitals are provided with all speciality departments in conformity with statutes laid down by the Medical Council of India for all-round training of medical students in every speciality. For various non-academic reasons, such hospital doctors have been allowed private practice in addition to their salary. This provision originally categorised as clinical specialties versus the non-clinical or the pre-clinical subjects like Anatomy, Physiology, Biochemistry, Preventive Medicine and so on has been unfortunate in its consequences. This separation of departments leads to a chasm and a large divide between them since those allowed private practice find it more lucrative. The clinician who is permitted this additional benefit tends to divert hospital facilities for private gain. There is naturally a rush of medical graduates for lucrative specialities which provide hospital beds, and a poverty of students for the less paying but more demanding and exacting specialities. Such a situation undermines the basic academic aspects of medicine involving hard study and research which lead to medical progress. The medical student is caught by the glamour of easy money. One sees, therefore, the anomaly of the diligent and hard-working academics in the profession devoted to medical knowledge and progress being derided and made objects of scorn and contempt while the mere hand-holder by his air of breezy confidence and his charming bedside manner becomes the trusted confidant of the powers that be. While the general practitioner and the specialist unattached to a hospital have to invest and build up a nursing home, a surgical operation theatre with all the expensive equipment and laboratory facilities, the hospital consultant has several advantages. The hospital surgeon needs only to walk into a fully-equipped theater with highly trained anesthetists and nursing staff to assist him. It is no wonder that every medical student aspires to be on the clinical side as a physician or surgeon, and that every woman student wishes to be an obstetrician and gynecologist, as it gives unlimited opportunities to have a full-fledged nursing home without affording its cost. Such unequal advantage rarely exists in other walks of life. The general practitioner who suffers a lack of such diagnostic and other facilities has to depend on the favours of the hospital doctor in the referral of difficult cases. Once referral takes place, the patient loses contact with the general practitioner. The hospital was originally meant for the ill patient and the government supports it for the indigent sick who cannot afford the services of a doctor or the comfort of a nursing home. The "open sesame" to the advantages of specialist care and diagnostic services, is the hospital bed which is made available by the hospital consultant only to those with money and influence. This state of affairs argues for a system whereby all hospital doctors should be full-time

specialists debarred from private practice and devoting their entire attention to medical teaching and research. This measure will also produce a better grade of medical graduates familiar with the techniques of the laboratory as well as the clinical examination at the bedside.

Such a development will be similar to the dramatic sea-change that has already taken place in the nursing services. A better-trained and qualified nurse has now taken over the tasks of recording blood pressure, intravenous fluid administration, drawing blood and other specimens for laboratory investigation, instrumental monitoring, and identification of sudden changes in the patient's condition, even in the context of intensive care units. Earlier, she could attend only to bed-making, food distribution, routine administration of medicine, recording the clinical trinity of pulse, temperature, respiratory rate, and the general cleanliness of the patient. This amounts to a near revolution in nursing practice.

Corporate Hospitals - the American Import

The American attitude to health and pleasure, backed by immense wealth, and the prospect of conquering disease by investigating in depth its causation and course, have encouraged doctors to sustain life at any cost. The world wonders at the type of meticulous and expensive care given in the hospitals of the U.S.A. American doctors have a powerful medical association to manifest their clout in professional matters. They are an affluent and exclusive group and its members own the hospital with all its equipment and command the confidence of the patients. They are among the best-placed members of their society with access to a relatively unbounded influence. Their only fear is that their professional mistakes may be uncovered by the very clever lawyers close to the patients. They have therefore, to protect themselves by various measures like explaining in time-consuming detail all the procedures for the patients under their care, painstaking record-keeping, heavy insurance, and high hospital costs. Patients in their turn, attempt to fend off these ruinous costs by insuring themselves for large amounts in different categories in case they fall ill. The high standards of living, the provision of safe water, the efficiency of public institutions like the Food and Drug Administration, whole-some nutritious food available in plenty, sanitary surroundings and vast open places, running hot water for baths and care in personal cleanliness of the American people cannot, however, be duplicated in India. Central Government schemes like ESI, CGHS, special medical benefits of government undertakings are being exploited to secure for fortunately-employed individuals and their families all the perquisites and steep costs of corporate hospitals at public expense. The common man gets little or no medicare. Corporate hospitals are proliferating like mushrooms on wet soil.

Non-resident Indian Doctors have been attracted to the ordered efficiency and meticulous cleanliness of American hospitals, which are run by doctors for private benefit. They have been remarkably successful in their attempts to produce replicas of these hospitals in this country. They attract a rich clientele caught by the glamour of foreign expertise, high technology instrumentation, and the aseptic cleanliness that affluent countries can well afford. These replicas have been built on surplus money and imported technology. They are exclusive, expensive, and have a fancy decor. Their hush-hush atmosphere, the busy reception desks with receptionists hanging on to phones and computers, high-tech aids, the display of art pieces, the air of business efficiency and the chilling politeness are daunting. Specialists are too pre-occupied to answer queries as they are flitting from one patient to another with no questions allowed. People are not regarded as human beings with their perennial need for reassurance but are treated like assembly-line case material to be dealt with by computer management. They seem to be interested only in building international reputations through sophisticated techniques which ordinary mortals are not meant to understand. Such a glacial aloofness is hardly the model for a poor country to follow. One gets the sneaking suspicion that beneath the cold glitter

of the polished floors, immaculate furnishings and dust-free cleanliness, there lurks the cruel glint of a calculated desire to fleece the patient and a rapacity "red in tooth and claw".

It pains one to note that these fabulous facilities are reserved for the rich few who can pay for them. The destitute seem to be doomed to neglect and left to pray that they do not have the misfortune to land in a hospital for treatment, where the rich alone can afford the expense involved; others pay for medical insurance; the super-rich and the politicians in power go abroad for treatment. Even the rich complain that they are run through a mill of diagnostic procedures for which they have to pay heavily and that they are over-used to serve the purpose of funding the hospital.

The Distinction between Health Care and Medical Care (Medicare)

Positive health has been defined by the World Health Organisation as: "a state of complete mental and social well being and not merely the absence of disease or infirmity". Health constitutes the joy of living since it liberates us from the consciousness of the body and makes one free to look outward.

India has various geographical regions and the requirements for health care vary in each region. Man attempts to be in equilibrium with his living environment. The physical features of the environment comprise both the climate of the place and factors like soil fertility, with its mineral deficits and excesses. Soil use determines the amount and quality of the food-stuffs grown on the land. The well-being of the people of the area is dependent upon the nutritional value of the food consumed, the personal hygiene, the innumerable variations in personal behavior termed life-styles, the habits of work, play and exercise and indulgences like tobacco, alcohol, and addictive drugs. Unemployment, illiteracy, forced displacement, poverty and other types of undeserved want also influence the maintenance of health. The so-called poverty-line should be determined by a multiple factor scoring that includes not just income but also employment, adequate nutrition, and housing. The poorer the community, the greater the prevalence of disease. Communicable diseases are spread by polluted water and infected persons, making the incidence of illnesses like cholera, typhoid, infective-hepatitis, worm-infestation, leprosy, skin infections, sexually transmitted diseases, AIDS, tuberculosis and filariasis distressingly common. Under-nutrition and malnutrition are more prevalent among the poor and sap the vitality of the people. A whole variety of vitamins, poly-unsaturated fatty acids, minerals and trace elements in minute amounts are essential for the preservation of health. A host of nutritional components, including energy-supplying food-stuffs, the quality of food proteins and the proportion of essential amino acids present in them are all necessary for the promotion of health and the prevention of sub-clinical deficiency states. The lack or imbalance of even a single constituent can impair health.

It has been said that the protection and security of the individual is the main justification for the state or government. The health of the people is a sizable part of national wealth and a major component of economic and social progress. Preventive health care is concerned not only with prevention of disease but also with the postponement of untimely death and the avoidance of disability. A good health care system should ideally prevent the demand for medical care and should be concerned with the promotion of health rather than the treatment of illness. More public health laboratories should be instituted for the testing of safe water supply, milk outlets, food hygiene, adulteration of food-stuffs and edible oils, identification of insect, rodent and other vectors of disease, factory management, occupational health of workers in industry, noise pollution control and so on, as they are a major safeguard for community health. School teachers should be given courses in and certificates of proficiency about common diseases in schools and motivated to teach children to take precautions early. It is said that an institution will rise or fall

to the level of the people who work it. Generally, there are no specific solutions to some problems of organisation but better organisation and the elimination of sources for disorganization. A health care (or health maintenance) organisation may be considered under two broad heads. A) Extra-Medical Preventive Health maintenance B) Curative Medical Care of the individual.

Extra-Medical Preventive Health Maintenance

This includes environmental and public health engineering aspects like provision of safe water, environmental sanitation, garbage and waste disposal and treatment, provision of public toilets, epidemio-logical surveillance which includes identification and control of the density of insect, rodent and other vectors in the causation and spread of disease; universal health education and promotion of personal hygiene; training of public health personnel; and provision of well-staffed and well-organised public health laboratories. The maintenance of health and personal hygiene should be part of the school curriculum. There is no substitute for high standards of personal hygiene in the control of communicable diseases. Periodic examination of school children and referral to specialists whenever required can forestall many problems. Health education suffers by default since health care benefits are invisible and since human welfare by itself brings no direct benefits. Every individual bears responsibility for his personal health.

The economic effects of the recent plague-scare should alert us to the image India presents of personal risk to the potential tourist. Misery belts of deprived populations surround our towns and cities. The very old, the very young, vagrant men, women and children of migrant families, the poor, the infirm, the handicapped and the hungry are huddled together in unsanitary tenements where drinking water is scarce. The dirt and filth of human aggregation, the social tensions caused by poverty and precarious food supply, the woeful state of mal-nutrition, the ignorance of people to the health hazards to which they are exposed can trigger off communicable diseases in an epidemic form. Social pressures of this kind also generate raw violent passions and render life cheap and of little consequence. It has to be remembered that the people represent the work-force of the nation and that the economic loss caused by disease lowers the quality of work and productivity.

The medical doctor is not a public health engineer. Medical education as such is not yet relevant to community needs. The present form of education of doctors is concerned with the understanding of the human body, disease and its treatment. It should be obvious that the supply of safe drinking water, environmental sanitation, garbage and waste disposal, atmospheric and water pollution, poverty and over-crowding and the spread of communicable diseases are not the doctor's direct concern. They are the responsibility of the government to be dealt with by corporations, municipalities and the panchayats.

Curative Medical Care

Medical care includes the care of the aged with chronic illness, the lonely and the homeless, the infirm and the disabled, the mentally ill and the retarded as well as rehabilitation, trauma care and cardio-pulmonary resuscitation, which is an integral part of medicine. In the past, treatment was directed primarily towards supporting normal physiological functions through removal and repair of affected organs and the use of prostheses. Modern surgery can now operate on or replace vital organs like the heart and the kidney while maintaining function by heart-lung and artificial kidney machines. Failing respiratory function can be supported by artificial respirators. Heart function can be improved through cardiac pace makers, de-fibrillators, and coronary by-pass surgery. Kidney, corneal and lens transplants have now become commonplace. Prolongation of the life of the aged with chronic illness through

advances in medical knowledge and the application of high-level medical technology are now the focus of popular media attention. The simultaneous measurement of many variable constituents through automated machines which can process even a small amount of blood to produce a "biochemical profile" are increasingly in use. The design, installation, and maintenance of these machines is a complicated matter since failure of the machine can spell disaster, when the uninterrupted and effective performance of the machine comes to a stop. An intimate man-machine interaction is called for. The danger is that even the specialist can become the slave of the machine. The machine is intended to help mankind and the tender, loving care of the patient is the primary essential. Medical care implies personal attention.

Medical education is at present mainly concerned with curative medical care of the individual patient in the community or in large and small hospitals with individual administrators in charge. Medicare implies close personal attention and service of the sick patient at the bedside. It demands time, patient and constant observation of the ill patient with a view to restore him to health. Medicare calls for a different type of organisation, a personal as opposed to a community approach.

Medicare at the Crossroads

There is obviously a demand for multispeciality hospitals, similar to our general hospitals meant for the deprived sections of society, offering the best medical care that modern scientific medicine can extend. Personalized medicare should ideally, be available round the clock, even for emergency services, to all. Such provision under Central Government schemes like CGHS, ESI, special medical benefits of government undertakings are being exploited at public expense for relatively few fortunately-employed individuals and their families to avail of the fabulous facilities of corporate hospitals in spite of the steep costs involved. The common man gets little or no medicate. It is yet a surprise to find that corporate hospitals for private gain are proliferating like mushrooms on wet soil. Privately run single-speciality hospitals tend to focus on a particular part of the body and not on the patient as a whole and run a whole gamut of needless investigations as a routine procedure too expensive for the vast majority of people. There is boundless scope for *an intermediate stage* of clinical and laboratory investigation by a general physician before the patient is referred for speciality care which is actually needed only in a very few cases. Group practice clinics, specialist-run out-patient services – dental, eye, ENT, woman-care, orthopedic, general surgery, small nursing homes with equipment to treat emergencies and an operation theatre where different kinds of specialists can perform surgery, can take care of isolated cases. Small self-contained hospitals with a roster of out-patient specialists, operation theatres and diagnostic laboratories at a moderate level of sophistication, and provision for the stay of attendants who can look after the creature comforts of patients, are becoming increasingly popular. Such institutions offer medicare at relatively inexpensive cost with reasonable comfort and deserve greater support. They will also help to solve the problem of increasing unemployment among qualified doctors.

The Problems of Medicare Facing the Common Man

When one considers the amount of talent in the country and the number of trained people available at the highest levels, it appears difficult to account for the relative dearth of medical help obtainable to the vast majority of the people. The common man gets little or no medicare. He usually goes to the medical practitioner or sometimes directly to the government general hospital when he cannot afford to pay for the services of a doctor. It is well-known that there is over-crowding of hospital out-patient clinics, scarcity of diagnostic facilities, little attention to the individual patients (except in isolated cases when it becomes overwhelming), poor nursing

care, insufficient follow-up of cases and a cynical sarcasm about the preventive aspects of illness. There are frequent complaints about shady practice, bed-selling and a greed for money with a corresponding lack of attention to the deserving poor and needy who grumble that only those with money and influence get sufficient attention. The expense of living and moving around in the cities, the long periods of waiting in queues at out-patient departments, the loss of a working day; the hurried examination by the "busy" doctor; the routine, even shabby disposal, without any real benefit, have all resulted in pushing away all but the poorest of the poor from the government hospitals. The absence of a culture of courtesy, the blunt refusals and little hurts, the needless delays and the corruption at all levels of the hierarchy add to the feeling of neglect. There are no free hospitals offering medicare to the people; even the working class labourer prefers a private clinic to the government hospital. The responsibility for such care also devolves upon the general practitioner.

From the official party angle, one is told that there are not enough doctors on hand, that the diagnostic services have not received the attention they are due, that materials and building are short, that nurses and para-medical personnel are needed in larger numbers and that the money spent on health services is entirely inadequate. Government reaction is to institute more PHCs, increase the number of beds, recruit more doctors and para-medical staff, and enhance the costs for medical care. A mere quantitative expansion of the legacy from colonial times will not by its very nature achieve the quality of services desired, for such quality depends upon the spirit of service and the dedication to duty among the members of the services who should learn to do more specialized jobs with superior effort. Doctors deserve a decent living as honoured citizens contributing their knowledge and essential services to society and not just as members of a privileged guild trying to wrest all the riches they can from a captive population.

How do these considerations apply to today's world of overpriced medicine and fractured health care? Despite their attractiveness in theory, neither of the two options facing health care today -- government-sponsored health care or private for-profit hospitals and clinics -- has proved acceptable in practice. Government health care is supposedly available to the indigent but notable for its inefficiency, since daily wage earners end up wasting their time waiting in long lines for many hours before they get even a few minutes of a doctor's attention which affords little relief. This is perhaps the reason why even poor patients prefer to go to private clinics to get more personal attention. In contrast, private hospitals are believed to provide superior specialist care but abuse their patients in several ways -- by insisting that patients undergo pathological tests only at affiliated laboratories and buy drugs only from affiliated pharmacies at higher than market prices; by withholding necessary treatment if the patient cannot pay or has insufficient insurance; and by deliberately prolonging treatment and cost by carrying out more than the optimally required investigations so that finances are generated for the upkeep of the hospital and the doctors' exorbitant fees. This has led to the perception that doctors at these private clinics are like vultures, feeding on the dead and dying. It is unfortunate that such fierce and unholy competition should exist among the many polyclinics and corporate hospitals that afford similar sophisticated facilities.

Health is at bottom an issue in social justice. Health-care and all the preventive measures required to accomplish it on a nation-wide scale cannot be left to the "invisible hand" of economic and market forces but needs to be presented with a human face and a caring handshake to all the people concerned. Either the private doctors have to be regulated so that they provide cost-effective and compassionate care, or government agencies have to be made more efficient. The problems of large-scale poverty, malnutrition and subclinical ill-health call for a reliable and responsive organisation with the requisite resources. In my opinion, only the government has the wherewithal to deal effectively with the disease burden in communicable and non-communicable

diseases, maternal care in pregnancy, child health and nutrition, immunisation, the incomplete cure and recurrence of illnesses, cancer self-care, screening for early and timely detection, and other areas which need directed effort. Government has the ability to implement and, when necessary, to enforce the required measures though perhaps in a top-down fashion. Government with its network of multiple agencies can deal firmly with organisational inadequacies, imbalances in resource distribution, remedy unequal access to health care, provide training of competent health-care service providers. Clean water, better nutrition, good sanitation, effective immunisation, disease control, and the accreditation of hospitals, nursing homes and laboratory facilities can only be the responsibility of government agencies. These measures require earnest political will and coordinated effort by well-administered agencies so that all the vulnerable sections of society like women, children, the disabled, the infirm and the aged receive attention. Private agencies and non-governmental organisations with their zeal and enthusiasm can do a lot to assist government in joint efforts. Health education on a massive scale starting in homes and schools is needed to promote preventive self-care and healthy life-styles.

So how can government-sponsored medicine be made more efficient and attractive to both patients and medical workers? Doctors in government service may be paid less than their counterparts in for-profit organisations, but they should be able to derive satisfaction from the thought that they are making an essential contribution to society. The whole concept of medical "care" is based on compassion for the sufferings of other human beings, possibly the greatest of human virtues. The success of Doctors without Borders and other such compassionate organisations shows that medical workers will accept numerous hardships and lower emoluments if they feel that what they are doing makes a difference to society. Without this, medical workers compare their salaries with those in business and participate in agitations and strikes which affect patient services, and so the medical profession gets a bad name since the public cannot differentiate between mistaken diagnosis, faulty treatment and negligent behaviour.

Unlike private hospitals which can focus an enormous amount of attention on individual patients who have the means to pay, patients can demand from government hospitals only reasonable skills and not the highest skills which are available only at the top levels in medical or surgical practice. However, what is available should not deviate too far from standard medical practice.

A Few Specific Recommendations:

- extended out-patient services in general hospitals
- more effective functioning of PHCs utilizing laboratory diagnostic aids
- reduction in the number of formulations offered by drug firms, which creates confusion even in the minds of pharmacists; and the adoption of the shortened WHO list of approved drugs with the use of generic names in their prescription and use
- round-the-clock 24-hour clinics in different parts of cities following a routine similar to that in general hospitals
- accredited diagnostic laboratories in suitable locations
- polyclinics run by voluntary health organizations and members of the Indian Medical Association for deprived sections of the populations like vagrant families, rickshaw pullers, auto drivers, building workers and artisans.

Summary

It is evident from the above analysis that a positive state of health and well-being, as well as relief from anxiety about illness, depend to a large extent upon a family doctor or physician who should, ideally, act as a confidant of the family.

The qualified general practitioner can help enormously in the initial stages of a disease, by performing a detailed clinical investigation of a patient, an investigation which should be complemented by diagnostic laboratory procedures. Laboratory investigation, if accurate and performed in an accredited laboratory, can detect many serious illnesses in the early stages and abort or cure them by indicating the right line of treatment. Such a procedure, vigorously practised, will obviate the general tendency, so common nowadays, for people to go in for alternative systems of therapy like ayurveda, homeopathy and so on to obtain the needed relief in a random, hit-or-miss manner.

The move away from general hospital and general practitioner to specialists and super-specialists in corporate hospitals, which possess numerous facilities and have sophisticated technological equipment for accurate diagnosis, can be halted if the unconscionably wide gap between the specialist and the general practitioner is narrowed so that the latter is better prepared to meet life-threatening situations. A flexible and modified `core' curriculum must be devised in the programme of training of the medical under-graduate. It is essential that the medical student and the qualifying general practitioner be exposed to all types of medical, surgical, obstetric, pediatric and resuscitative emergencies during the course of training so that he will be capable of handling all types of medical crises. Such training and education will make the qualified doctor's attitude supportive since he has time to spare for the patient and will, ideally, be in charge of his/her general welfare even during specialist care. When the patient is able to place a robust faith in the doctor and rely on him/her, delay in instituting the correct line of treatment can be avoided.

Health care as a positive state of well being in the community and medical care as the treatment of illness in the individual can be considered under two headings: 1) Extra medical preventive health maintenance and 2) Curative medical care of the patient. Extra-medical preventive health maintenance is under the purview of the government and Public Health Engineering services and is not exactly the province of curative care by the medical doctor. Government agencies must step in to ensure that amenities like safe drinking water, sanitation and clean surroundings for all, are provided so that communicable diseases caused by unhygienic practices can be kept at bay.

It is only when the individual has succumbed to disease that the role of the general practitioner becomes vitally important. Medicare, which implies personal attention to the patient, and demands time and observation on the part of the doctor, is a personal affair which can only be dealt with by a well-trained and qualified general practitioner supported by reliable diagnostic aids. Such a doctor can play the role of a family physician. Such interaction between a patient and the family doctor where he acts as mediator between his patient and the outside world of specialists, will be facilitated and furthered if he is motivated by service to the community at large and not just by monetary gain or personal profit. This attitude, as this article has sought to show, is unfortunately the prevailing tendency today and has resulted in the decline of the status of the general practitioner in the eyes of both the specialist and the general public. The conflict lies in the general population's stubborn, though mistaken, total reliance on alternative therapies on the one hand and the super-specialist on the other.

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